Fig. 1



Fig. 2

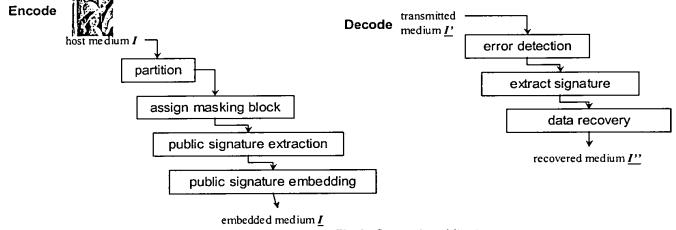
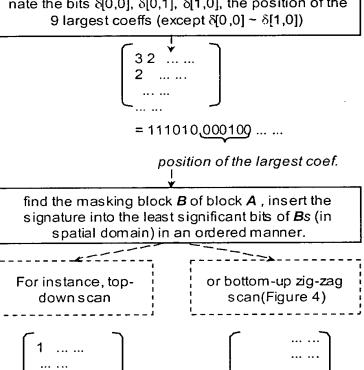


Fig 2. General architecture

Fig. 3

generate the signature of block A: 1. perform DWT; 2.quantize the lowband coefficients (DC & AC coeffs in the 2nd diag line (see Fig. 4)); 3. concatenate the bits  $\delta[0,0]$ ,  $\delta[0,1]$ ,  $\delta[1,0]$ , the position of the 9 largest coeffs (except  $\delta[0,0] \sim \delta[1,0]$ )



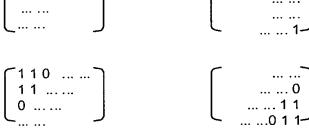


Fig 3. Embedding strategy

Fig. 4

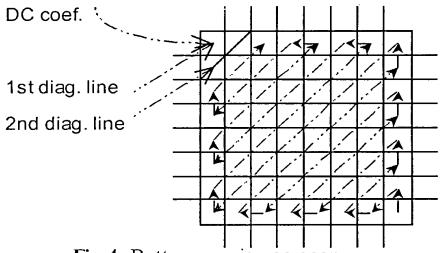


Fig 4. Bottom up zig-zag scan

## Figs 5a 5b 5c

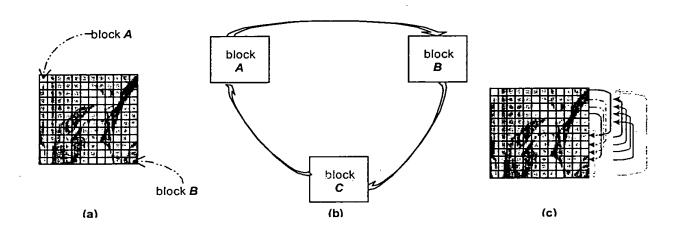
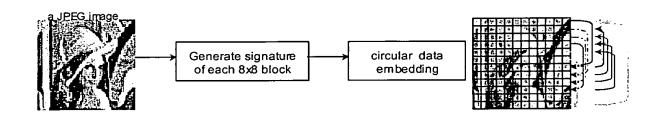
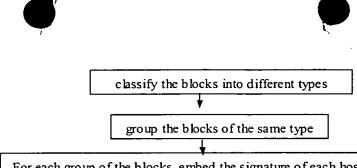




Fig. 6





For each group of the blocks, embed the signature of each host block into its corresponding masking block in the similar way shown in Figure 3.

Fig 7



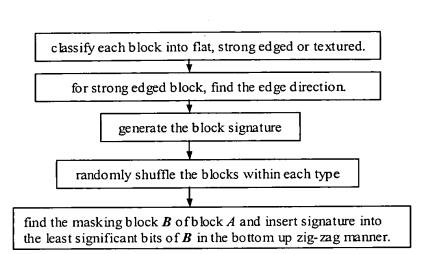


Fig 8